

### Gas Tight Damper - Pneumatic

Type : Gas Tight Damper

Model : For Pneumatic Drive : GTD-GB-40-B-Pn

Blade : Aerofoil Type

Construction : Galvanized Steel (GI)  
Stainless Steel (SS)

Gas tight dampers are designed such that they can isolate sections of a ventilation system with a very high level of sealing (gas tight). This can be required for safety reasons in certain operational conditions.

**GTD-GB-40-B-Pn** shut of dampers are designed so that after closure, even with failure of power supply to the actuator, the damper maintains the sealed closure in accordance with KTA 3601 (Guidelines for Nuclear Plant) and A0 A60 (type approved) for Marine, Oil & Gas applications. The compact design and robust actuator mechanisms of these shut-off dampers enable them to be installed in any orientation.

#### Damper Ratings

**Max Leakage Rating :** As per Standards KTA 3601  
(0.01 m<sup>3</sup>/h x m<sup>2</sup> at 2000 Pa)

**Operational Rating :** Actual ratings are size dependent

**Air Velocity:** 3000 fpm (15 m/sec)

**Pressure :** 8" water gauge (2KPa).

**Max . Holding Pressure:** 20" W.g (5Kpa)  
(in closed condition)

#### Temperature Ratings

Operational Temp : 250°C/482°F for a minimum of 2Hr.

Normal operation : -20°C to +120°C

No Fire : -4°F to + 248°F

Tunnel Application : -20°C to +250°C

Under Fire : for 2 hours minimum  
: -4°F to / +482°F  
for 2 hours minimum

#### Standard Construction

##### Frame

14 gauge (2 mm) thick galvanized steel sheet with 2" (50 mm) external flanges.

##### Blade

Double Skin blades (Aerofoil) of 14 gauge (2 mm) thick roll formed galvanized steel.

##### Blade Seals

300°C High temp, resistant Silicon rubber blade seals.

##### Jamb Seals

Stainless Steel.

##### Bearings

High temperature resistant concealed ball bearings.

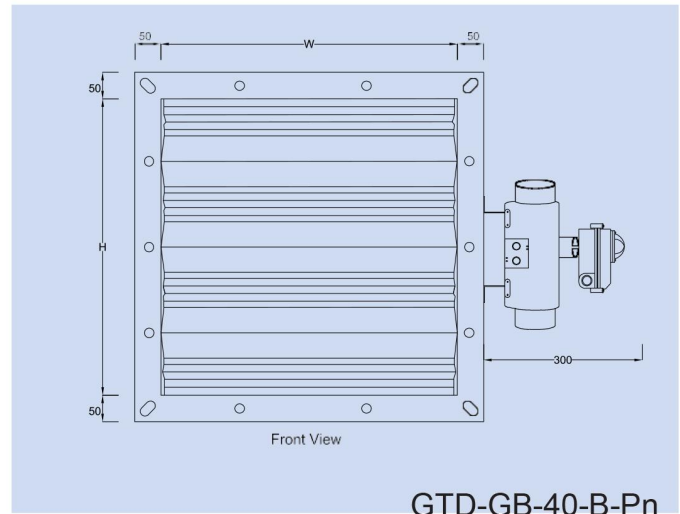
##### Axle

¾" (19 mm) Diameter axle.

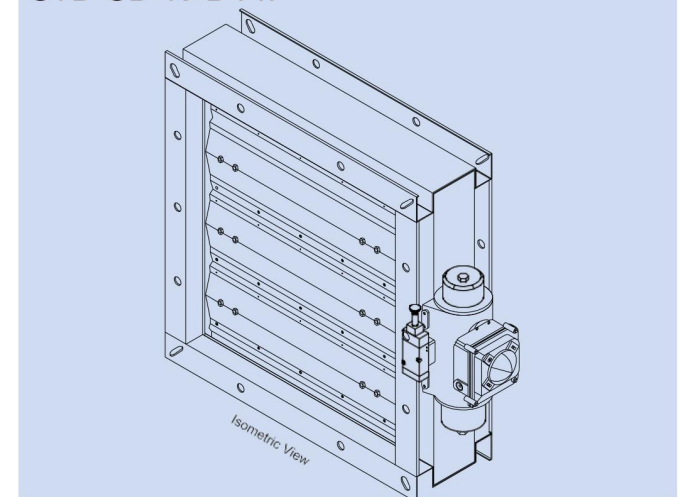
**Drive :** Operation by Pneumatic actuator. (Model: XL-131)  
(Operating Pressure 5 bar) and adjustable throttling valve.

**Note :** \* Standard Construction.

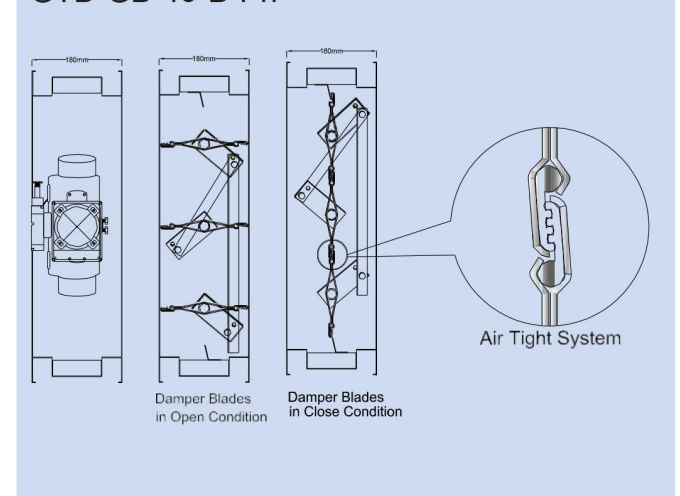
### B-40 Series



#### GTD-GB-40-B-Pn



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## Gas Tight Damper - Pneumatic

## B-40 Series

### Pneumatic Actuator Ratings

At 250°/482°F for a minimum of two hours

### Pneumatic Actuator Specification

Temperature range

Normal operation : -20°C to +120°C

No Fire : -4°F to + 248°F

Tunnel Application : -20°C to +250°C

Under Fire : for 2 hours minimum

: -4°F to / +482°F

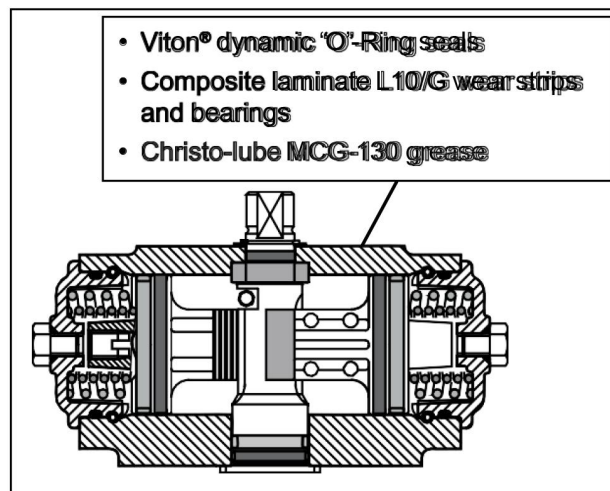
for 2 hours minimum

Dynamic O-ring seals : Fluorocarbon Rubber 9775 (Viton®).

Static O-ring seals : Nitrile Rubber (Buna-N)

Bearing material : High temperature composite laminate L10/G

Grease : Christo-lube MCG-130



Model Number	Spring Rating	Torque from Springs	Torques from air stroke (Nm) at given operating air pressure (bar)															
			3.0 bar(g)		4.0 bar(g)		5.0 bar(g)		5.5 bar(g)		6.0 bar(g)		7.0 bar(g)		8.0 bar(g)			
			Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
XL131	S60		38	23	26	11	42	27	58	43	66	51	75	59	91	76	107	92
I Number	Spring Rating	from Springs	40 PSI		50 PSI		60 PSI		70 PSI		80 PSI		90 PSI		100 PSI		120 PSI	
			Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
XL131	S60		233	200	192	59	291	157	389	255	487	353	585	452	683	550	781	648
<b>Note:</b>			200	192	59	291	157	389	255	487	353	585	452	683	550	781	648	977

We recommend that the valve (or louvre) manufacturer supplies the maximum required torque values (including any adjustments or suggested safety factors for valve or louvre service conditions or application). Additionally, the valve manufacturer must identify at which position(s) and direction(s) of rotation (Counter Clock Wise or Clock Wise) these maximum requirements occur.

### NAMUR solenoid valves

\*1/4", 3/2 - 5/2, NAMUR interface, electrically operated spool valves, with static seals, high flow, for mounting on NAMUR interface.

Coils and connectors are to be ordered separately.

### Namur solenoid valves Specifications

Fluid : Compressed filtered air with or without lubrication

Pressure range: 1 ÷ 10 bar

Temperature range : -10°C ÷ +60°C

Orifice: 7 mm

Flow : 1.000 NI/min at 6 bar with ΔP 1 bar

Minimum piloting pressure: 1,5 bar

Minimum external air pressure: 1,5 bar

Mounting: In any position

Manual override: Two stable positions

Response time: Energising: De-energising:

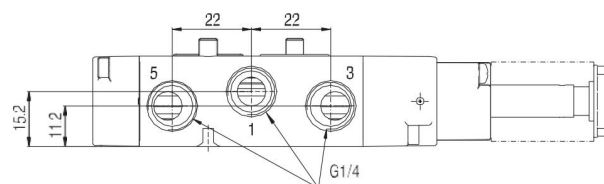
Materials : Body: Aluminium

Heads: Plastic

Spool: Chemical nickel plated aluminium

Distancers: Plastic

Seals: Nitrile rubber (NBR)



### Code key

Actuation	Size	Function
NE= NAMUR electrical	1/4"	30 = 3/2 NC 32 = 3/2 solenoid/solenoid *50 = 5/2 solenoid/spring 51 = 5/2 solenoid/solenoid

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## Gas Tight Damper - Pneumatic

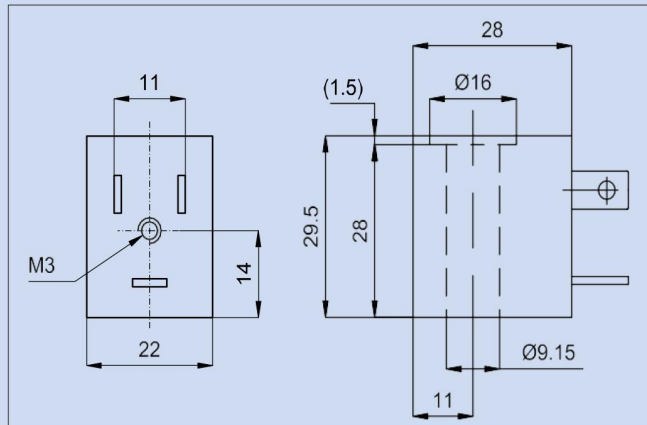
## B-40 Series

### NAMUR solenoid valve Accessories

#### Coils

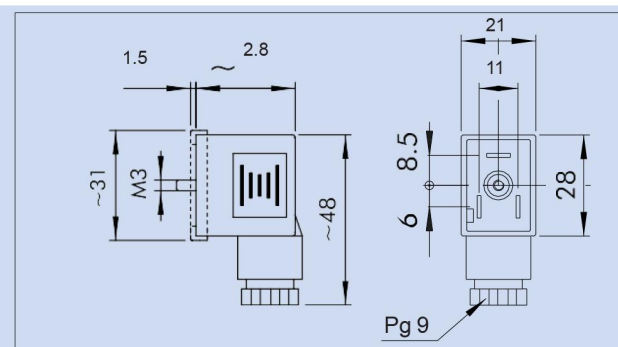
Coils with low electrical consumption conforming to EN 60204.1 and VDE 0580 standards, class F

Technical data	Direct current	Alternating current
Voltage tolerance	± 10%	± 10%



Co

Tipo	Colour	Ø Cable
Standard	Black	PG9
LED 24V	Transparent	PG9
LED 110V	Transparent	PG9
LED 220V	Transparent	PG9
LED + VD R24V	Transparent	PG9
LED + VDR110V	Transparent	PG9
LED + VDR 220V	Transparent	PG9



model	(Weather Proof)	(Explosion Proof)
Enclosure	Weather Proof, IP67	Ex d IIC T6, IP66
Mechanical Switch	2 SPDT	2 SPDT
Electrical Ratings	15A 125V/250V AC 0.6A 125V DC 0.3A 250V DC	15A 125V/250V AC 0.6A 125V DC 0.3A 250V DC
Terminal Strip	8 Contacts	8 Contacts
Temp. Ratings	-20° ~ 85°	-20° ~ 85°
Conduit Entries	2-PF 1/2"	2-PF3/4"



ALS30  
Explosion Proof



LS710  
Weather Proof







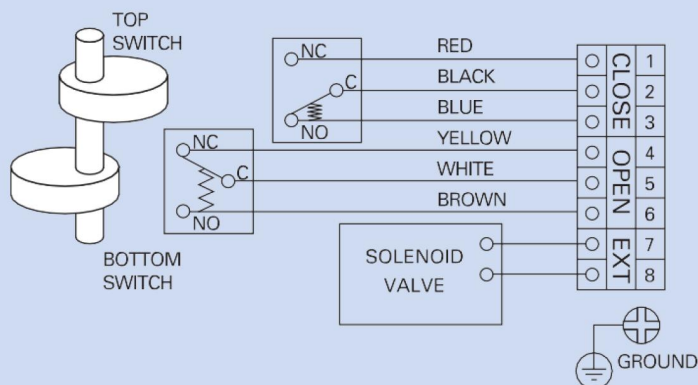
## Gas Tight Damper - Pneumatic Limit Switches

## B-40 Series

## Wiring Diagram

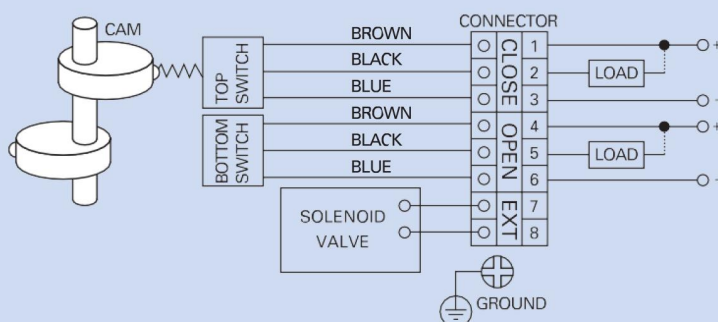
### Mechanical Switch (2 SPDT)

- Micro Switch
- Used in     approved.
- Type : Mechanical Switch
- Power : 15A-125 or 250V AC,  
0.6A-125V DC, 0.3A-250V DC



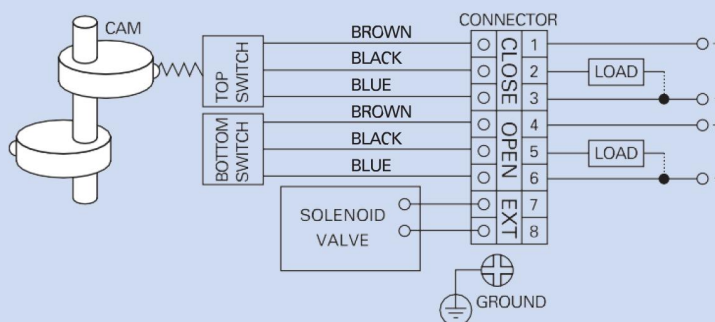
### Proximity Switch (Out Put Type : NPN)

- Proximity Switch
- Used in **CE** approved.
- Type : Proximity Switch
- Power Supply : 12~24V DC  
(OPERATING VOLTAGE : 10~30V DC)



### Proximity Switch (Out Put Type : PNP)

- Proximity Switch
- Used in **CE** approved.
- Type : Proximity Switch
- Power Supply : 12~24V DC  
(OPERATING VOLTAGE : 10~30V DC)



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